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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/876,411	06/07/2001	Junichi Toyoda	075834.00086	7306
33448	7590	01/28/2008	EXAMINER	
ROBERT J. DEPKE			ADDY, THJUAN KNOWLIN	
LEWIS T. STEADMAN				
ROCKEY, DEPKE & LYONS, LLC			ART UNIT	
SUITE 5450 SEARS TOWER			PAPER NUMBER	
CHICAGO, IL 60606-6306			2614	
			MAIL DATE	
			DELIVERY MODE	
			01/28/2008	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/876,411

Applicant(s)

TOYODA ET AL.

Examiner

Thjuan K. Addy

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-16 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-16 and 19-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on October 29, 2007 has been entered. Claims 1, 2, 4, 8, 9, 12, 19, and 20 have been amended. Claims 7, 17, and 18 have been cancelled. Claims 21-27 have been added. Claims 1-6, 8-16, and 19-27 are now pending in this application, with claims 1 and 3 being independent.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-6, 8-16, and 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thiel et al (US 6,288,682), in view of Paulick (US 5,710,987).

4. In regards to claims 1, 2, 23, and 26, Thiel discloses a communication apparatus and portable telephone (See Fig. 1a and mobile telephone 10) comprising: an antenna (See Fig. 1b-1c and antenna 14) for transmitting and/or receiving a wireless signal, a signal processing circuit (See Fig. 3 and transceiver 78) for processing a signal corresponding to a wireless signal received by the antenna, a conductive case (See Fig. 3 and dielectric cylinder 60) surrounding and housing all or part of the signal processing circuit, an electro-magnetic wave absorber (See Fig. 1a-1c and structure 12) with one surface adjacent a predetermined area of the conductive case for absorbing electro-magnetic waves and thereby reducing electro-magnetic waves reaching a user of the

communication apparatus, and a conductive member (See Fig. 1c and conductive sheet 22) provided at another surface of the electro-magnetic wave absorber and being electrically connected to the conductive case (See col. 4 lines 37-49). Although Thiel discloses a signal processing circuit for processing a signal corresponding to a wireless signal received by the antenna. Paulick, more specifically, discloses a signal processing circuit (See Fig. 2 and radiotelephone transceiver circuitry 224) for processing a signal corresponding to a wireless signal received by the antenna (See col. 3 lines 4-19). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to employ these limitations within the apparatus as a way for the portable electronic apparatus or communication apparatus to receive and transmit signals.

5. In regards to claims 3 and 9, Thiel discloses all of claims 3 and 9 limitations, except a portable telephone comprising: a circuit for generating a wireless signal corresponding to said sound signal generated by said microphone. Paulick, however, discloses a circuit for generating a wireless signal corresponding to said sound signal generated by said microphone (See Fig. 1 and microphone 116) (See col. 3 lines 4-19).

6. In regards to claims 4 and 14, Thiel discloses all of claims 4 and 14 limitations, except a portable telephone, wherein said circuit comprises: a transmitting circuit for generating a wireless signal corresponding to a sound signal from the microphone, a receiving circuit for generating a sound signal in response to a wireless signal received by the antenna and outputting the sound signal, and a printed circuit board containing the transmitting circuit and the receiving circuit. Paulick, however, discloses a portable

telephone, wherein said circuit comprises: a transmitting circuit (See Fig. 2 and transceiver circuitry 224) for generating a wireless signal corresponding to a sound signal from the microphone (See col. 3 lines 4-19), a receiving circuit (See Fig. 2 and pager receiver circuitry 218) for generating a sound signal in response to a wireless signal received by the antenna and outputting the sound signal (See col. 3 lines 4-19), a printed circuit board (See Fig. 2 and printed circuit board 226) containing the transmitting circuit and the receiving circuit (See Fig. 2), and a shield case (See Fig. 2, back housing 104 and front housing 102 including a shield portion 204) that surrounds a receiving circuit (See Fig. 2 and pager receiver circuitry 218), transmitting circuit (See Fig. 2 and transceiver circuitry 224), and a printed circuit board (See Fig. 2 and printed circuit board 226).

7. In regards to claims 5, 6, 10, 21, and 24, Thiel discloses a portable telephone and communication apparatus, wherein said electro-magnetic wave absorber (See Fig. 1a-1c and structure 12) is arranged at a surface of said shield case close to a head of a user of the portable telephone at the time of a call (See col. 2-3 lines 56-7 and col. 4 lines 57-61).

8. In regards to claim 8, Thiel discloses a portable telephone, wherein said conductive member and said shield case are connected by a metal wiring (See col. 4 lines 37-49 and col. 5 lines 48-67).

9. In regards to claims 11 and 27, Thiel discloses a portable telephone and communication apparatus, wherein said electromagnetic wave absorber is made in a

desired shape from a mixture of said magnetic loss material (e.g., dielectric loss material 24) and a synthetic resin (See col. 4 lines 37-49 and col. 4 lines 62-67).

10. In regards to claims 12, 22, and 25, Thiel discloses a portable telephone and communication apparatus, further comprising: said feeder used for connecting the switching circuit and the antenna, and the electro-magnetic wave absorber is closely bonded to a portion of the shield case located between the feeder and the receiving circuit (See col. 4 lines 37-49). Paulick, however, discloses a switching circuit and a feeder on the printed circuit board for supplying the wireless signal from the transmitting circuit to the antenna and supplying the wireless signal from the antenna to the receiving circuit (See Fig. 2, printed circuit board 226, and col. 3 lines 4-19).

11. In regards to claim 13, Thiel discloses a portable telephone, wherein said shield case is made of an insulating material and has a conductive layer formed on its surface (See col. 5 lines 61-67). Paulick, however, discloses said conductive layer is connected to a layer of a ground level voltage of said printed circuit board (See Fig. 2, printed circuit board 226, and col. 3 lines 4-19).

12. In regards to claim 15, Thiel discloses a portable telephone, further comprising an outer housing made of an insulating material for housing said transmitting and receiving circuit, said shield case, said electro-magnetic wave absorber, and said microphone (See col. 4 lines 37-61), wherein said receiving circuit is arranged in the vicinity of one end of said housing, said microphone is arranged in the vicinity of another end of said housing (See Fig. 1a, microphone 16, and col. 4 lines 45-49), and said

antenna is a retractable antenna able to extend from said one end in the longitudinal direction of said housing (See col. 4 lines 62-67).

13. In regards to claim 16, Thiel discloses a portable telephone, further comprising a feeder for connecting said switching circuit and said antenna, wherein said electromagnetic wave absorber is closely bonded at the portion of said shield case located between said receiving circuit and said feeder (See col. 4 lines 37-49). Paulick, however, discloses a switching circuit on said printed circuit board for supplying said wireless signal from said transmitting circuit to said antenna, and for supplying said wireless signal from said antenna to said receiving circuit (See Fig. 2, printed circuit board 226, and col. 3 lines 4-19).

14. In regards to claim 19, Thiel discloses the communication apparatus, wherein the conductive member is electrically connected to a ground layer of the signal processing circuit (See col. 4 lines 37-67).

15. In regards to claim 20, Thiel discloses the portable telephone, wherein the conductive member is electrically connected to a ground layer of the circuit (See col. 4 lines 37-67).

Response to Arguments

16. Applicant's arguments filed 10/29/2007 have been fully considered but they are not persuasive.

17. Applicants argue that the Examiner has construed the cylindrical antenna structure 30/60/14 as the claimed "conductive case", but such a construction fails to read-on the claim limitation requiring that the conductive case "surround and house all or a portion of the signal processing circuit" that processes a signal corresponding to a wireless signal received by the antenna, and accordingly, for at least this reason, the Examiner cannot rely upon the antenna structure 30/60/14 as reading on the claimed "conductive case." Applicants further argue that the Examiner has used the antenna structure 30/60/14 to read on both the claimed "antenna " for transmitting and/or receiving a wireless signal" and the claimed "conductive case for surrounding a signal processing circuit" which receives a signal from the antenna. Applicants state that Thiel discloses that the antenna of Fig. 3 does not guarantee a reduction in the exposure of a user to high energy radiation, but only may reduce it (likely depending on which monopole is currently active). Applicants further state that the reflector 12 of Thiel is not an electromagnetic wave absorber, and is not comprised of electromagnetic wave-absorbing material. Applicants argue that neither reference discloses a conductive shield case that surrounds a receiving circuit, transmitting circuit, and a printed circuit board. Applicants further argue that Thiel fail to disclose any wire connection between the conductive layer 22 cited by the Examiner and the conductive case 60 cited by the Examiner. Applicants state that neither Paulick, nor Theil disclose, teach, or suggest

the additional claim limitation requiring that the electro-magnetic wave absorber is closely bonded to a portion of the shield case located between the feeder and the receiving circuit.

18. In response to Applicants' argument that the Examiner has construed the cylindrical antenna structure 30/60/14 as the claimed "conductive case", but such a construction fails to read-on the claim limitation requiring that the conductive case "surround and house all or a portion of the signal processing circuit" that processes a signal corresponding to a wireless signal received by the antenna, and accordingly, for at least this reason, the Examiner cannot rely upon the antenna structure 30/60/14 as reading on the claimed "conductive case", Examiner respectfully disagrees. Examiner made it clear, in the previous Office Action, that the dielectric cylinder 60 was used to read on the claimed "conductive case", and not the antenna 50 (See Fig. 3). As may be seen in Fig. 3, the dielectric cylinder 60 surrounds and houses all or a portion of the signal processing circuit (See Fig. 3 and transceiver 78) that processes a signal corresponding to a wireless signal received by the antenna (See Fig. 3 and antenna 50). Therefore the antenna structure 30/60/14 is not being used to read on the claimed "conductive case". Furthermore, Applicants have incorrectly identified the dielectric cylinder as being an antenna structure. The disclosure and Fig.3 of Thiel clearly indicate that element 60 is a dielectric cylinder and not an antenna (See col. 5 lines 48-67). Furthermore, on page 10 and 11 of Applicants' remarks, in regards to Fig. 2, Applicants acknowledge the fact that element 30, of Thiel, is an antenna, and that

element 40, of Thiel, is a dielectric cylinder, therefore, why would Applicants refer to element 60, of Fig. 3, as being an antenna, and not as being a dielectric cylinder.

19. In response to Applicants' argument that the Examiner has used the antenna structure 30/60/14 to read on both the claimed "antenna " for transmitting and/or receiving a wireless signal" and the claimed "conductive case for surrounding a signal processing circuit" which receives a signal from the antenna, Examiner respectfully disagrees. Examiner read the antenna, of Thiel, as being element 50, and the conductive case as being element 60).

20. In response to Applicants' argument that Thiel discloses that the antenna of Fig. 3 does not guarantee a reduction in the exposure of a user to high energy radiation, but only may reduce it (likely depending on which monopole is currently active), Examiner respectfully disagrees. Even though col. 7 lines 40-41, of Thiel, state that the antenna of Fig. 3 may reduce a user to high energy radiation, col. 4 lines 57-61, of Thiel, state that "the structure 12 has the effect of blocking the passage of electromagnetic radiation to the user's head in the vicinity of the antenna 14, and beneficially causing the reflected radiation to act in an additive manner to maximize received or transmitted signals." Therefore, the reflector (e.g., structure 12) of Thiel is an electromagnetic wave absorber.

21. In response to Applicants' argument that the reflector 12 of Thiel is not an electromagnetic wave absorber, and is not comprised of electromagnetic wave-absorbing material, Examiner respectfully disagrees. Thiel discloses the electromagnetic wave absorber as being made in a desired shape from a mixture of

said magnetic loss material (e.g., dielectric loss material 24) and a synthetic resin (See col. 4 lines 37-49 and col. 4 lines 62-67).

22. In response to Applicants' argument that neither reference discloses a conductive shield case that surrounds a receiving circuit, transmitting circuit, and a printed circuit board, Examiner respectfully disagrees. Paulik does disclose a conductive shield case (See Fig. 2, back housing 104 and front housing 102 including a shield portion 204) that surrounds a receiving circuit (See Fig. 2 and pager receiver circuitry 218), transmitting circuit (See Fig. 2 and transceiver circuitry 224), and a printed circuit board (See Fig. 2 and printed circuit board 226).

23. In response to Applicants' argument that Thiel fail to disclose any wire connection between the conductive layer 22 cited by the Examiner and the conductive case 60 cited by the Examiner, Examiner respectfully disagrees. Thiel discloses that the conductive layer and the shield case are connected by a metal wiring (See col. 4 lines 37-49 and col. 5 lines 48-67).

24. In response to Applicants' argument that neither Paulick, nor Theil disclose, teach, or suggest the additional claim limitation requiring that the electro-magnetic wave absorber is closely bonded to a portion of the shield case located between the feeder and the receiving circuit, Examiner respectfully disagrees. Thiel discloses the feeder being used for connecting the switching circuit and the antenna, and the electro-magnetic wave absorber is closely bonded to a portion of the shield case located between the feeder and the receiver (See col. 4 lines 37-49). Paulick discloses the switching circuit and a feeder on the printed circuit board for supplying the wireless

signal from the transmitting circuit to the antenna and supplying the wireless signal from the antenna to the receiving circuit (See Fig. 2, printed circuit board 226, and col. 3 lines 4-19).

Conclusion

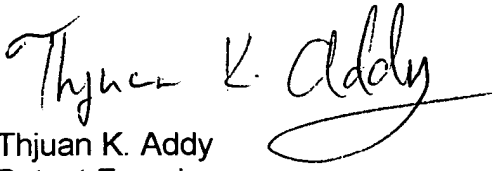
25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan K. Addy whose telephone number is (571) 272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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